

Lesson 2-5

Using Spreadsheets to Organize Data

Lesson Objective

To use spreadsheets to display data and solve problems

NAEP 2005 Strand: Data Analysis and Probability

Topic: Data Representation

Local Standards: _____

Vocabulary

A spreadsheet is _____

A cell is _____

Example

- ① **Reading a Spreadsheet** The spreadsheet shows payment amounts in two categories for three different dates.

	A	B	C	D
1	Date	Phone	Utilities	Total
2	10/15	\$68	\$118	
3	11/15	\$55	\$143	
4	12/15	\$72	\$159	

Column

Row

Cell

- a. What is the value in cell C3?

\$

- b. What does this number represent?

Quick Check

1. What is the value in cell B4? What does this number represent?

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Example

- ② **Formulas in a Spreadsheet** Use the same spreadsheet as in Example 1.
Write a formula for cell D3 that will calculate the total for 11/15.

	A	B	C	D
1	Date	Phone	Utilities	Total
2	10/15	\$68	\$118	
3	11/15	\$55	\$143	
4	12/15	\$72	\$159	
5	Total			

← Add the entries
in cells
and .

The formula that should go in cell D3 is .

Quick Check

2. For cell B5, write a formula that will calculate the total amount for the phone bills from 10/15, 11/15, and 12/15.

Gervase works after school and on weekends at a pet store, where he is paid \$5 per hour. He uses the following spreadsheet to keep track of the time he works and the money he earns.

	A	B	C	D	E
1	Day	Time In (p.m.)	Time Out (p.m.)	Hours Worked	Amount Earned
2	Monday	4	7		
3	Tuesday	4	7		
4	Thursday	4	8		
5	Saturday	1	9		
6			Total		

Write the value for the given cell.

1. A2

2. B2

3. B3

4. C3

5. C4

6. A4

Write a formula to find the value of each cell. Then calculate the value.

7. D5

8. E5

9. D6

10. E6

11. Rosario worked for \$14.50 an hour on the weekdays and \$15.25 an hour on the weekends. On Monday she worked 3 hours, Thursday 5 hours, Saturday 8 hours, and Sunday 8 hours.

- Make a spreadsheet similar to the one above. Use column B for hourly wage, column C for hours worked, and column D for amount earned.
- How much money did Rosario make each day and at the end of one week?

Materials needed: spreadsheet program

A spreadsheet can be thought of as a table of values. Each cell has a name. For example, A1 is the cell in row 1 and column A. You can use your spreadsheet's built-in functions to quickly create a table of values for any given expression.

	A	B
1	Side Length (ft)	Perimeter (ft)
2	2,345	
3	100,200	
4	35,999	
5		

1. Enter the numbers in the cells as shown.
2. Create a table of values in column B that represents the perimeter of the squares whose side lengths are the numbers in column A. Since the perimeter of a square is 4 times the side length, type the formula $4*A2$ in cell B2. Press **ENTER**. What is the perimeter of the square with side length 2,345 ft?

3. Use a copy command to find the perimeters for each of the remaining squares. What are the remaining perimeters?

4. Enter the side length 112.0345 in cell A5. What does your spreadsheet give as the value of the perimeter?

5. Use a new spreadsheet to create a table of Celsius temperatures for the Fahrenheit temperatures 32, 50, 86, 95, and 212 degrees using steps 2 and 3 above. First enter Fahrenheit temperatures in cells A2 through A5. Then enter the formula $(5/9)*(A2 - 32)$ in cell B1. Use a copy command to fill in column B.

What are the Celsius temperatures given by your spreadsheet?
